Health Canada Santé Canada

Your health and safety... our priority. *Votre santé et votre sécurité... notre priorité.*

Proposed Maximum Residue Limit PMRL2014-71

Clethodim

(publié aussi en français)

26 September 2014

This document is published by the Health Canada Pest Management Regulatory Agency. For further information, please contact:

Publications
Pest Management Regulatory Agency
Health Canada
2720 Riverside Drive
A.L. 6604-E2
Ottawa, Ontario K1A 0K9

Internet: pmra.publications@hc-sc.gc.ca
healthcanada.gc.ca/pmra
Facsimile: 613-736-3758
Information Service:
1-800-267-6315 or 613-736-3799
pmra.infoserv@hc-sc.gc.ca

Canada

ISSN: 1925-0835 (print)
1925-0843 (online)

Catalogue number: H113-24/2014-71E (print version)
H113-24/2014-71E-PDF (PDF version)

© Her Majesty the Queen in Right of Canada, represented by the Minister of Health Canada, 2014

All rights reserved. No part of this information (publication or product) may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, or stored in a retrieval system, without prior written permission of the Minister of Public Works and Government Services Canada, Ottawa, Ontario K1A 0S5.

Under the authority of the *Pest Control Products Act*, Health Canada's Pest Management Regulatory Agency (PMRA) has concluded that the addition of new uses on dill and caraway to the product label of Select Emulsifiable Concentrate and Centurion Emulsifiable Concentrate, containing technical grade clethodim, is acceptable. The specific uses approved in Canada are detailed on the label of Select Emulsifiable Concentrate, *Pest Control Products Act* Registration Number 22625 and Centurion Emulsifiable Concentrate, *Pest Control Products Act* Registration Number 27598.

The evaluation of these clethodim applications indicated that the end-use products have merit and value and the human health and environmental risks associated with the new uses are acceptable.

Before registering a pesticide for food use in Canada, the PMRA must determine the quantity of residues that are likely to remain in or on the food when the pesticide is used according to label directions and that such residues will not be a concern to human health. This quantity is then legally established as a maximum residue limit (MRL). An MRL applies to the identified raw agricultural food commodity as well as to any processed food product that contains it, except where separate MRLs are specified for the raw agricultural commodity and a processed product made from it.

Consultation on the proposed MRLs for clethodim is being conducted via this document (see Next Steps, the last section of this document). A summary of the field trial data used to support the proposed MRLs can be found in Appendix I.

To comply with Canada's international trade obligations, consultation on the proposed MRLs is also being conducted internationally by notifying the World Trade Organization, as coordinated by the Standards Council of Canada.

The proposed MRLs, to be added to the MRLs already established for clethodim, are as follows.

Table 1 Proposed Maximum Residue Limits for Clethodim

Common Name	Residue Definition	MRL (ppm)[1]	Food Commodity
Clethodim	2-[1-[[[(2*E*)-3-chloro-2-propen-1-yl]oxy]imino]propyl]-5-[2-(ethylthio)propyl]-3-hydroxy-2-cyclohexen-1-one, including metabolites containing the 2-cyclohex-1-enone moiety	3.0	Dill seeds
		1.5	Caraway seeds
		0.8	Dried dillweed leaves
		0.7	Fresh dillweed leaves

[1] ppm = parts per million

MRLs established in Canada may be found using the Maximum Residue Limit Database on the Maximum Residue Limits for Pesticides webpage. The database allows users to search for established MRLs, regulated under the *Pest Control Products Act*, both for pesticides or for food commodities.

International Situation and Trade Implications

MRLs may vary from one country to another for a number of reasons, including differences in pesticide use patterns and the locations of the field crop trials used to generate residue chemistry data.

Table 2 compares the MRLs proposed for clethodim in Canada with corresponding American tolerances and Codex MRLs.[1] American tolerances are listed in the Electronic Code of Federal Regulations, 40 CFR Part 180, by pesticide. A listing of established Codex MRLs is available on the Codex Alimentarius Pesticide Residues in Food website, by pesticide or commodity.

Table 2 Comparison of Canadian MRLs, American Tolerances and Codex MRLs (where different)

Food Commodity	Canadian MRL (ppm)	American Tolerance (ppm)	Codex MRL (ppm)
Dill seeds	3.0	Not Established	Not Established
Caraway seeds	1.5	Not Established	Not Established
Dried dillweed leaves	0.8	12.0 (Herb subgroup 19A)	Not Established
Fresh dillweed leaves	0.7		Not Established

Next Steps

The PMRA invites the public to submit written comments on the proposed MRLs for clethodim up to 75 days from the date of publication of this document. Please forward your comments to Publications (see the contact information on the cover page of this document). The PMRA will consider all comments received before making a final decision on the proposed MRLs. Comments received will be addressed in a separate document linked to this PMRL. The established MRLs will be legally in effect as of the date that they are entered into the Maximum Residue Limit Database.

[1] The Codex Alimentarius Commission is an international organization under the auspices of the United Nations that develops international food standards, including MRLs.

Appendix I

Summary of Field Trial Data Used to Support the Proposed MRLs

Residue data from field trials conducted in Canada were submitted to support the domestic use of Select Emulsifiable Concentrate and Centurion Emulsifiable Concentrate on dill and caraway. Clethodim was applied to dill and caraway, which were harvested according to the proposed label directions. In addition, a processing study in treated dill leaves and stem was reviewed to determine the potential for concentration of residues of clethodim in processed commodities.

Maximum Residue Limits

The recommendation for maximum residue limits (MRLs) for clethodim was based upon the submitted field trial data, and the guidance provided in the white paper of the OECD MRL Calculator. Table A1 summarizes the residue data used to calculate the proposed MRLs for dill and caraway.

Table A1 Summary of Field Trial and Processing Data Used to Support Maximum Residue Limits (MRLs)

Commodity	Application Method/ Total Application Rate (g a.i./ha)	Preharvest Interval (days)	Residues (ppm)		Experimental Processing Factor
			Min	Max	
Caraway	Foliar broadcast application / 87-92	52-60	<0.19	<0.50	
Dill seed	Foliar broadcast application / 92-95	36-47	<0.19	1.67	
Fresh leaves and stems of dill	Foliar broadcast application / 92-95	36-47	<0.19	0.286	0.89× (dill oil)
Dried leaves and stems of dill	Foliar broadcast application / 92-95	29-47	<0.19	0.502	

Following the review of all available data, MRLs of 3.0 ppm (dill seeds), 1.5 ppm (caraway seeds) 0.8 ppm (dried dillweed leaves) and 0.7 ppm (fresh dillweed leaves) are recommended to cover residues of clethodim in/on these commodities. Residues of clethodim in/on dill seeds, caraway seeds, dried dillweed leaves and fresh dillweed leaves at the proposed MRLs will not pose an unacceptable risk to any segment of the population, including infants, children, adults and seniors.